

GQI Asphalt Committee

August 24, 2004

Meeting minutes

Meeting held at Macon Area Engineers Auditorium at 9am, August 24, 2004. Attendees listed in Appendix A.

-Asphalt wedge

The meeting was started with an introduction of Bryant Poole, State Maintenance Engineer, who gave a presentation on the use of the asphalt safety wedge. The use of the safety wedge allows for a sloped transition at the longitudinal edge of pavement instead of a straight drop-off and is intended as a safety improvement measure. Bryant handed out a draft Specification and a shop drawing of a wedge that was designed by Maintenance. (See Appendix B) The Draft Spec will be sent through the normal Specification review procedure with anticipation of using the Specification by January 2005.

-Governor's Fast Forward Program

Georgene Geary provided a brief overview of the Governor's Fast Forward program. Additional information is on the DOT website under "Featured Links" at: <http://www.dot.state.ga.us/index.shtml>

-Old Business

Status of Pilot Projects/Special Provisions

Peter Wu and Sheila Hines reported on the status of the Special Provisions for asphalt that were developed through the Technical Subcommittee("Locking Point" specs). One major project is let with the new Specifications. Maintenance will be selecting 4 projects per District with different mix types to use the Special Provision in resurfacing projects as early as the November letting. After experience is gained through these pilot projects it is the intent to include this Special Provision in all Contracts.

Long Lasting Pavement update

The Department does have a subcommittee, under the Pavement Design Committee, looking at Long Lasting pavements, including the perpetual pavement theory.

NCAT update

Peter reported on the International Long Lasting Pavement Workshop that was held at NCAT and passed out a handout on NCAT which can be found at: <http://www.eng.auburn.edu/center/ncat/>

-New business

Thickness on 25 mm

Sheila reported that with the new “Locking Point” spec we will also be looking at changing the thickness requirements on 25 mm, anticipating that they will be 2-1/2 inch minimum and 4 inch maximum.

Status of Asphalt Index Research Project

Georgene reported that this report was nearing completed review by GDOT and would be released as a standard research report shortly. Roger noted that GHCA had a task force reviewing and will be presenting their recommendations to the GHCA Board and the DOT Commissioner shortly.

-Subcommittee Status

Roger led a general discussion on the subcommittee status and members were defined for each subcommittee noted below. (See Appendix C for members)

Technical Subcommittee

Proposed GDT 125 changes will be sent to the Technical Subcommittee for discussion.

Equipment Subcommittee

Roadtec has requested the DOT review their 1000 MTV. This was recommended to go to the Equipment subcommittee for review.

Seminar/Workshop Subcommittee

Roger discussed the idea of holding the 2005 Seminar at a hotel in Columbus and combine the meeting with a trip to NCAT and the East Alabama Paving facility to view their automatic sampler. It was discussed that the group could be broken up into sections and rotated, with one section going to the Track, one to the Plant and one to the NCAT Auditorium for a lecture. Also mentioned was On the Job Safety and Night Paving Safety as possible topics for the Auditorium lecture, focusing on the workers on the road.

Joint Training Subcommittee

Requiring Plant operators to be certified along with the Quality control personnel was discussed and the Joint Training Committee was asked to look into the issues related to this.

-GQI topics for 2004 meeting

The theme of the 2004 GQI meeting is “Fast Forward”. Asphalt has 3 sessions, tentatively set up for Session B and C on Thursday and Session E on Friday. Thursday’s sessions were tentatively noted as Pavement Smoothness and Perpetual Pavement. For the Smoothness session the State Pavement Engineer is going to give an overview of the technology used for measuring smoothness and a TSE or Contractor will talk on how to build smoothness into the pavement. The Committee changed the Perpetual Pavement topic to a topic on Pavement Selection. Roger offered to check with NAPA or the Asphalt Institute for a speaker on Pavement Selection. Friday’s session is set up as a panel discussion on new technologies, permeable pavements, etc. Roger and Peter Wu agreed to work on panel members and topics for this session.

Other issues that came up were: Compliance with EPA and other Agency regulations after 911, is it illegal to park a distributor on the side of the road, not behind a gate? The Technical committee was assigned the task of looking into this and to report back to the full Committee at the next meeting

-Other

David Painter was introduced as the new FHWA Division representative for pavements. Chris Wagner has gone to FHWA the Resource Center but will still be involved in pavements.

GSP 21 changes were reviewed again. After making changes based on the discussion, GSP 21 will be updated on the Source and sent out to all plants on QPL 45.

The GHCA has preprinted plant diaries available. Contractors are encouraged to contact the GHCA for copies for their plants.

-Adjourn – meeting was adjourned at 11 am.

Upcoming conferences/Training opportunities:

<ul style="list-style-type: none">• Porous Pavement Regional Seminar Atlanta, GA November 1, 2004	<ul style="list-style-type: none">• GQI Athens, GA December 8-10, 2004
<ul style="list-style-type: none">• SEAPUG 2004 Baton Rouge, LA November 15, 2004	

Appendix A- Attendees

GQI ASPHALT COMMITTEE MEETING AUGUST 24, 2004

Name	Affiliation	e-mail	Phone
Georgene Geary	GDOT	georgene.geary@dot.state.ga.us	404-363-7512
Roger Dill	GHCA	amma@mchsi.com	229-382-1630
Gerald Strickland	CITGO Asphalt	gstrick@citgo.com	770-267-8226
Joe B. Street	GHCA	streetjb@peoplepc.com	
Lee Moore	APAC	almoore@ashland.com	
Chris Wagner	FHWA	christopher.wager@fhwa.dot.gov	
Wayne Marshall	Reeves	w.marshall@reevescc.com	
Donald Hazel	Scruggs	dhazel@scruggscompany.com	
Bobby G. Bragg	Dykes	bobbyb_qct@hotmail.com	
Tony Daughtry	Tractor Eq.Co.	tdaughtry@tractor- equipment.com	
Jim Leber	GDOT		
Lynn Bean	GDOT	lynn.bean@dot.state.ga.us	
Kimbel Stokes	Miller Group	kSokes@Millergroup.ca	
Andrew Johnson	CMS	anna6598@bellsouth.net	
Tony O'Neal	GDOT	tony.oneal@dot.state.ga.us	
Tony Felix	GDOT	tony.felix@dot.state.ga.us	
Sheila Hines	GDOT	sheila.hines@dot.state.ga.us	
Gene Googe	Ross of GA, Inc	genegooge@yahoo.com	
Yuki (Sammy) Nose	Sakai America, Inc.	y-nose@sakaiamerica.com	
Chris Lodge	CW Matthews Const. Co.	CHRISL@cwmatthews.com	
Jimmy Camp	ERS	jcamp@ersnell.com	
Rick Douds	GDOT	richard.douds@dot.state.ga.us	
Daniel Mann	GDOT	daniel.mann@dot.state.ga.us	
Don Wishon	GDOT	donald.wishon@dot.state.ga.us	
Kyle Cook	Ergon	kyle.cook@ergon.com	
Jerry Reece	Koch	reecej@kochind.com	
Peter Wu	GDOT	peter.wu@dot.state.ga.us	
Wayne Boatright	Shepherd	wboatright@shepconst.com	
Gary Rohrer	APAC	GWRohrer@ashland.com	
Paul Davis	Pave-Tech	Paul@RBBaker.com	
Dave Painter	FHWA	david.painter@fhwa.dot.gov	

Appendix B – Asphalt Wedge Special Provision

First Use Date 2001 Specifications:

Date Submitted: _____

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

SPECIAL PROVISION

Project No. _____

P.I. No. _____

SECTION 400 – Hot Mix Asphaltic Concrete Construction

Delete and Add the following to Section 400.3.02.C:

C. Equipment at Project Site

1. Cleaning Equipment

Provide sufficient hand tools and power equipment to clean the roadway surface before placing the bituminous tack coat. Use power equipment that complies with Subsection 424.3.02.F, “Power Broom and Power Blower.”

2. Pressure Distributor

To apply the bituminous tack coat, use a pressure distributor that complies with Subsection 424.3.02.B, “Pressure Distributor.”

3. Bituminous Pavers

To place hot mix asphaltic concrete, use bituminous pavers that can spread and finish courses that are:

- As wide and deep as indicated on the Plans

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- True to line, grade, and cross section
- Smooth
- Uniform in density and texture
- Capable of mechanically producing a maximum 45 degree (measured to the horizontal plane) wedge, when shown on/required by the plans, along the outside edge of pavement.

- a. Continuous Line and Grade Reference Control. Furnish, place, and maintain the supports, wires, devices, and materials required to provide continuous line and grade reference control to the automatic paver control system.
- b. Automatic Screed Control System. Equip the bituminous pavers with an automatic screed control system actuated from sensor-directed mechanisms or devices that will maintain the paver screed at a pre-determined transverse slope and elevation to obtain the required surface.
- c. Transverse Slope Controller. Use a transverse slope controller capable of maintaining the screed at the desired slope within ± 0.1 percent. Do not use continuous paving set-ups that result in unbalanced screed widths or off-center breaks in the main screed cross section unless approved by the Engineer.
- d. Screed Control. Equip the paver to permit the following four modes of screed control. The method used shall be approved by the Engineer.
 - Automatic grade sensing and slope control
 - Automatic dual grade sensing
 - Combination automatic and manual control
 - Total manual control

Ensure that the controls are referenced with a taut string or wire set to grade, or with a ski-type device or mobile reference at least 30 ft (9m) long when using a conventional ski. A non-contacting laser or sonar-type ski with at least four referencing mobile stations may be used with a reference at least 24 ft. (7.3 m) long. Under limited conditions, a short ski or shoe may be substituted for a long ski on the second paver operating in tandem, or when the reference plane is a newly placed adjacent lane.

Automatic screed control is required on all Projects: however, when the Engineer determines that the Project conditions prohibit the use of such controls, the Engineer may waive the grade control, or slope control requirements, or both.

- e. Paver Screed Extension. When the laydown width requires a paver

screed extension, use bolt-on screed extensions to extend the screeds, or use an approved mechanical screed extension device. When the screed is extended, add auger extensions according to the paver manufacturer's recommendations.

NOTE: Do not use extendible strike-off devices instead of approved screed extensions. Use only a strike-off device in areas that would normally be luted in by hand labor.

f. **45 Degree Wedge.** When shown on/required by the plans, ensure that a 45 degree maximum and 30 degree minimum (measured to the horizontal plane) wedge along the outside edge of pavement is mechanically produced after final compaction of the asphaltic concrete course. Use an approved mechanical device that can:

- Thrust against the asphalt mixture to eliminate objectionable voids as the mixture passes through the wedge device.
- Produce a wedge with a uniform texture, shape, and density while automatically adjusting to varying heights encountered along the roadway shoulder.

4. Compaction Equipment

Ensure that the compaction equipment is in good mechanical condition and can compact the mixture to the required density. The compaction equipment number, type, size, operation, and condition is subject to the Engineer's approval.

5. Materials Transfer Vehicle (MTV)

a. Use a Materials Transfer Vehicle (MTV) when placing asphaltic concrete mixtures on Projects on the state route system with the following conditions:

1. When to use:

- The ADT is equal to or greater than 6000,
- The project length is equal to or greater than 3000 linear feet (915 linear meters),
- The total tonnage (megagrams) of all asphaltic concrete mixtures is greater than 2000 tons (1815 Mg).

2. Where to use:

- Mainline of the traveled way
- Collector/distributor (C/D) lanes on Interstates and limited access roadways
- Leveling courses at the Engineer's discretion.

b. Ensure the MTV and conventional paving equipment meet the

following requirements:

1. MTV

- Has a truck unloading system which receives mixture from the hauling equipment and independently deliver mixtures from the hauling equipment to the paving equipment.
- Has mixtures remixing capability by either a storage bin in the MTV with a minimum capacity of 14 tons (13 megagrams) of mixture and a remixing system in the bottom of MTV storage bin, or a dual pugmill system located in the paver hopper insert with two full length transversely mounted paddle mixers to continuously blend the mixture as it discharges to a conveyor system.
- Provides to the paver a homogeneous, non-segregated mixture of uniform temperature with no more than 20⁰F (18⁰C) difference between the highest and lowest temperatures when measured transversely across the width of the mat in a straight line at a distance of one foot to three feet from the screed while the paver is operating.

2. Conventional Paving Equipment

- Has a paver hopper insert with a minimum capacity of 14 tons (13 Mg) installed in the hopper of conventional paving equipment when MTV is used.
- c. If the MTV malfunctions during spreading operations, discontinue placement of hot mix asphaltic concrete after there is sufficient hot mix placed to maintain traffic in a safe manner. However, placement of hot mix asphaltic concrete in a lift not exceeding 2 in. (50 mm) may continue until any additional hot mix in transit at the time of the malfunction has been placed. Cease spreading operations thereafter until the MTV is operational.
- d. Ensure the MTV is empty when crossing a bridge and is moved across without any other contractor vehicles or equipment on the bridge. Move the MTV across a bridge in a travel lane and not on the shoulder. Ensure the speed of the MTV is no greater than 5 mph (8 kph) without any acceleration or deceleration while crossing a bridge.

Appendix C – Subcommittees

Technical

*Jimmy Camp	*Peter Wu
Wayne Marshall	Sheila Hines
Gene Googe	James Eason
Ronald Collins	
Jerry Reese	
Lee Moore	

Equipment

*Kim Stokes	*Tony Felix
Tony Daughtry	Sheila Hines
Chris Lodge	Georgene Geary
Wayne Boatright	
Donald Hazel	

Seminar/Workshop

*Roger Dill	*Georgene Geary
Gary Rohrer	Peter Wu
Joe Street	Sheila Hines
Tony Daughtry	
Ronald Collins	
Gerald Strickland	

***Denotes vice-chairs**

Joint Training

Wayne Marshall	Tony Felix (Wksp and QCT II)
Lee Moore	Rick Douds (QCT I)